

WFCO

TECHNOLOGIES

Innovating the future of **RV POWER.**



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Distributed by WFCO Technologies in the U.S.A. and Canada

PRODUCT CATALOG

Right now,
they're not
thinking
about their
battery
system.

Good.



WFCO's Auto-Detect delivers peace of mind and simplified delivery for dealers.

Auto-Detect is a patented* intelligent battery detection system that automatically selects the correct charging profiles for both lead acid and lithium ion batteries. Standard on all WFCO Converters, Power Centers and MBAs, Auto-Detect provides a long list of value-added features:

- Streamlines battery system selection/ installation for dealers and customers
- Optimizes batteries without new converter or manual switch
- Charges batteries accurately, maximizing battery system life
- Innovative processor controls charging based on need of battery
- Eliminates the need to change converter when changing or upgrading your battery

* US Patent # 12,113,377

To learn more visit
WFCOtech.com

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For more detailed information on any of our WFCO Technologies’ products, manuals, specifications, or other detailed information, please scan the QR Code to access the WFCO Technologies website.



Innovating the future of RV Power

AUTOMATIC SMART CHARGING

BATTERY CHARGING

Batteries like to be charged in a specific way, depending on how deeply discharged they are. In addition to converting 120 V AC to 12 V DC to operate low voltage appliances, the converter/charger charges the RV battery(s) when connected to shore power. The three steps of regulated charging for lead-acid batteries are called "Three-Stage." A two-step process ("Two-Stage") is preferred for lithium batteries. WFCO converters with Auto-Detect will determine, after a complete charge cycle, which type of battery is connected (lead-acid or lithium phosphate) and apply the correct charge system accordingly. WFCO converters of every style have become the favored brand for power conversion and electric distribution in the RV industry. They provide RV owners with an efficient and cost-effective method to use an AC power source and power to DC components inside the RV while simultaneously charging accessory batteries.

SMART ENGINEERING: MULTI-STAGE CHARGING IS BETTER

WFCO's automatic converters provide optimized charging for RV batteries while extending their life. Lightly used batteries will only need the standard operating voltage provided in Power Mode to restore full charge. Charge Mode is used when a battery is depleted and needs extra power for fast charging.

RVs are frequently sold with at least one 12 V accessory battery installed. This is usually a deep-cycle battery that can sustain a slower power drain. As soon as the RV is connected to AC power, the converter begins charging the battery as needed while simultaneously providing DC power for all the appliances. RV owners find this practical when powering loads such as lights, radios, and refrigerators without being connected to AC power or running the motor home engine.

When the RV is connected to AC power, users frequently use the lights, refrigerators, fans, and other electronics as they would in their homes. RV users also expect the battery to be fully charged when they want to disconnect from power and move the RV or when they are dry camping and turn off their generator.

CHARGE MODE

WFCO converters continuously monitor the DC voltage and the output current. When a sustained high current is detected, indicating that the battery needs a significant charge, it will maintain the converter's DC output voltage at 14.4 volts for lead-acid batteries or 14.6 volts for lithium batteries. The increased voltage will charge the battery faster while still providing power to all the DC appliances in the RV.

In Charge Mode, observing the 14.4 volts DC output might not be possible initially if the battery is heavily discharged. This is because the converter may be in current which is accomplished by dropping the voltage slightly. As the battery charges, the voltage will soon rise to 14.4 volts at the charger's output terminals. It may take longer for the battery terminals to read 14.4 volts as well since there is always some voltage drop in the battery cables by the current draw.

As the battery charges, the current drawn by the battery will gradually decrease. WFCO converters are designed to end Charge Mode when the total current drawn from the converter drops to a threshold that indicates the battery is mostly (with lead-acid) or completely (with lithium) charged. If the current draw stays above the preset threshold, the converter will remain in Charge Mode for a maximum of four hours for lead-acid batteries or ten hours for lithium batteries. The time limit is to protect and extend the battery's life. If a large battery bank needs additional fast-charge time, the AC power can be cycled to reset the timer.

In most cases, a completely discharged battery connected to a WFCO converter can be charged in less than three hours. In some cases, adding more DC loads may reduce the current available for charging and lengthen the time needed to charge the battery. Batteries with damaged cells will also require additional time to charge and may never reach a full charge voltage.

POWER MODE

Because RVs today are designed with converters sized to provide ample DC output power for all DC loads in everyday usage, an RV will usually operate in Power Mode. Power mode provides an output of 13.6 volts DC. In this mode, power is available for operating the DC appliances and simultaneously topping off the charge level of the battery.

STORAGE MODE

Storage mode is the third stage of converter operation for lead-acid batteries. This mode provides a trickle charge to the battery and maintains a full charge. If the converter is supplied with continuous AC power for 48 hours, its output will drop from 13.6 to 13.2 volts. This lower voltage will keep the battery charged while not in use and still provide power to operate all DC appliances.

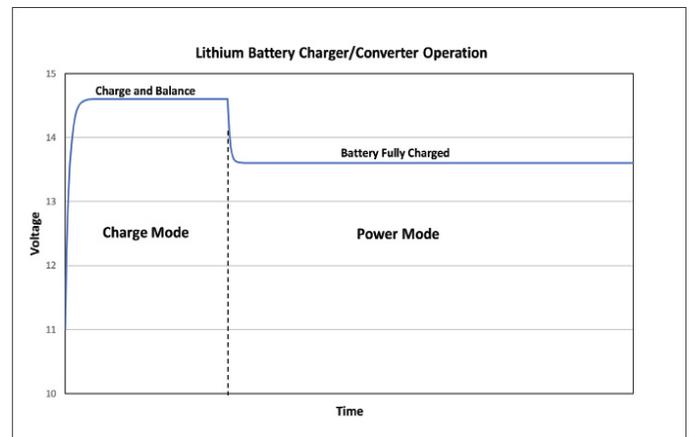
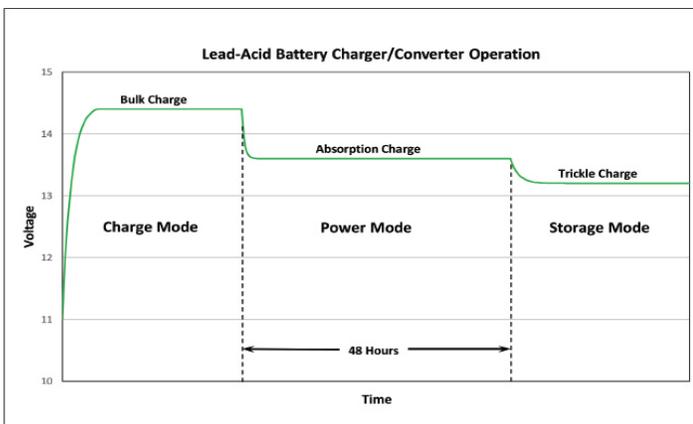
While in Storage Mode, the AC powered converter will continue to supply a low current trickle charge to the battery, enough to keep it at full charge with minimum electrolyte loss.

Cycling or interrupting AC power will cause the converter to exit Storage Mode and return to Power Mode. This allows lead-acid batteries to regain any charge lost due to self discharge, typically about 5% per month when there is no AC power.

Check the battery fluid levels periodically if the RV is in storage for thirty days or more. It is recommended to check the battery level at least every four weeks.

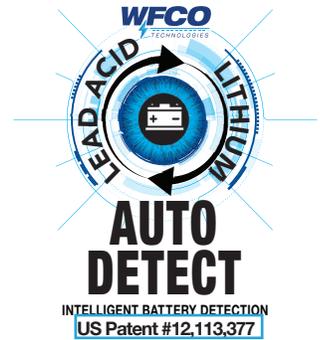
LITHIUM-ION BATTERIES

After every Charge Mode cycle that exceeds the programmed threshold, the Auto-Detect system will detect whether the battery is lead-acid or lithium-type. After that, the optimum profile will be used for the battery. In addition to lead-acid batteries, WFCO converter/chargers are optimized for lithium phosphate batteries used in RV applications. Lithium batteries do not need Storage Mode since they do not lose electrolytes. Therefore with a lithium battery, the converter will stay in Power Mode as long as AC is connected to keep the battery fully charged.



AUTO-DETECT:

Intelligent Battery Detection for YOUR RV Lifestyle



AUTO-DETECT

This product includes the exclusive “Auto-Detect” feature for the charging of batteries. With this new technology, the power converter will evaluate the charging cycle of a battery, determine the type of battery being used, and then choose the appropriate charging program (profile) to provide for the best performance and maintenance of that battery. Because of the differences between Lead Acid, AGM and Lithium type batteries, a system that provides a charge to the battery or batteries must be able to accommodate the different charging requirements. With the use of the “Auto-Detect” product, the charging requirement can be “detected” and is then automatically set for the type of battery being used. For standard Lead Acid and AGM batteries, WFCO power converters still use the Three-Stage Smart Charging to effectively maximize battery life by the different phases of the charge cycle. On the other hand, Lithium batteries will prefer the use of only two stages when charging, and therefore the power converter will charge using the WFCO Two-Stage Smart Charging system. NOTE: Regardless of charge profile (lead-acid or lithium), your battery is safe from harm and will still charge.

LED INDICATORS

WFCO converters have integrated LEDs which inform the user on which mode it is in. As it pertains to charging profiles, green is intended for the lead-acid charge profile while blue is intended for the lithium charge profile. The most important light of them all for charging is red, which signals bulk charge mode. When it comes to charging time and performance, green and blue will have much less impact than the red (bulk charge) light.

LEAD ACID & AGM THREE-STAGE SMART CHARGING

To maximize battery life for lead acid and AGM batteries, it is best to charge batteries slowly, keep them topped of with a trickle charge when the RV is not being used. The 3-Stage “smart” charger continuously measures the battery voltage output and regulates the amount of charge using three modes of operation: Power, Charge and Storage modes. All WFCO power converters have automatic three-stage switching power supplies. The converter senses which mode it needs to be in by checking the RV system voltage.

POWER MODE

The converter normally provides a constant target output voltage of 13.6 VDC (nominal) to power all the branch circuits. However, it is current limited, and if the output (load) current reaches its maximum, the output voltage will drop as necessary to hold the converter’s maximum output current level (the Amperage rating) without exceeding it.

CHARGE MODE

If the output current reaches its maximum (normally caused by a discharged battery), this will cause the converter to go into Charge Mode, which means the target output voltage will change to 14.4 VDC and a timer will start. Although the converter is outputting 14.4 VDC, you will not be able to read that on a voltmeter due to the voltage current relationship. As mentioned in the paragraph above, as load current increases, output

voltage decreases. The actual output voltage will not rise until the load current is reduced, which happens naturally as the battery charges or if 12 VDC appliances are turned off. Charge Mode will be maintained until the current draw drops to approximately five Amps, or until the timer reaches four hours (whichever happens first). Then the target output voltage is changed back to 13.6 VDC for Power Mode. Lights that are powered from the output may change brightness slightly at that time. Note: For a detailed explanation of the charging modes, please refer to our publication "Theory of Operation", document #AD TD-0001-0. 5

STORAGE MODE

The third mode of charging is what is called the "float" charge. This mode is designed to provide a "trickle charge" to the battery after the system observes no significant variations in current draw over a long period of time. When in Storage Mode, the voltage will reduce from 13.6V to 13.2V and supply the "trickle charge" which helps to preserve the life of the battery while keeping it charged and ready for use. A change in DC current will cause the converter to exit the mode and return to the Absorption mode and then to Bulk mode if required.

LITHIUM TWO-STAGE SMART CHARGING

The two-stage "smart" charger continuously measures the battery voltage output and regulates the amount of charge using two modes of operation: Charge and Power mode. TWO-STAGE CONVERTER VOLTAGE OUTPUT MODES

CHARGE MODE

This mode is designed with two purposes in mind. First, to quickly restore the energy back into the battery. Second, to ensure the lithium cells inside the battery remain balanced. This is accomplished by boosting the output voltage to 14.6 VDC and allowing the maximum current to flow as required by the loads. The charge mode stage could last anywhere from one to four hours based on the battery and load current which is being used. For a full battery, the charge stage has a minimum time requirement of one hour, which allows the lithium cells inside the battery the time required to "balance". For an empty battery, the charge stage has a maximum time requirement of four hours. If your application requires longer than four hours (such as a larger battery bank > 200 ah), a simple cycling of power will reset the timers. As the energy is restored into the battery, the DC system voltage will climb and the current from the converter will decrease. If the total amperage draw from the converter reaches a preset point (within the one-to-four-hour timer), the converter is designed to drop out of charge mode.

POWER MODE

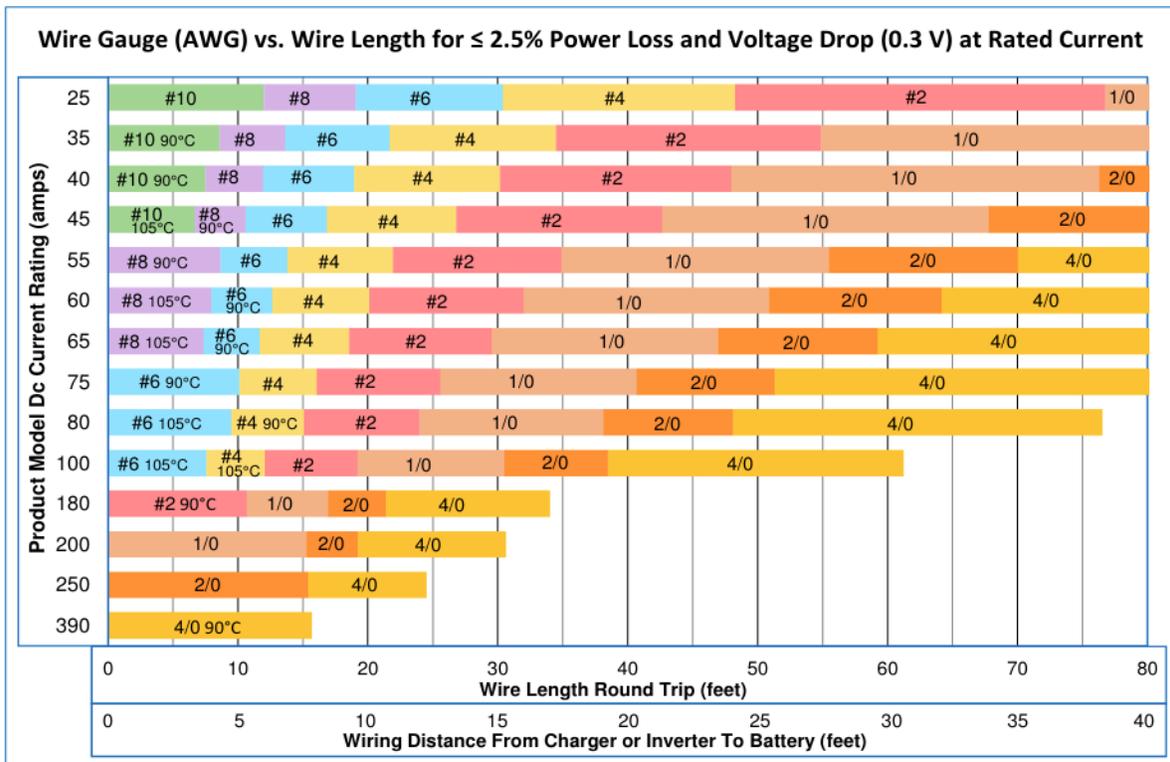
This mode is designed with one purpose in mind. This purpose is to provide a safe operating voltage for all loads in the RV. This is accomplished by reducing (from charge mode) the output voltage to 13.6 VDC and remaining at this voltage until the power is cycled to the converter. The power mode stage is the default or normal mode of operation, which has no timer associated with it. In this mode an output of 13.6 VDC is provided to the DC circuits in the RV. This voltage has a long-term history as the acceptable voltage for all loads in the RV, and should not place undue stress (nor reduce the longevity) of the lights and appliances in the RV. This is not to say that all loads will have an issue with a constant higher voltage; however, some loads may have an issue. Please refer to the individual manufacturer's specifications for acceptable operating voltage range of the connected load.

CHARGING PERFORMANCE

There are many factors that can impact charging performance in charge mode regardless of battery type (some may impact Auto-Detect operation):

- Length and gauge of wire from battery to converter – Can result in voltage drop and current loss, significantly increasing charge time. (See voltage drop chart below)
- Battery brand – Some lithium batteries have a higher operating voltage.
- Solar power installed without solar disconnect – This can cause competition during active charging and potentially disrupt both chargers.
- High current loads during bulk charge – Will extend the battery charge time due to reduced current available for charging. May also interfere with the Auto-Detect algorithm to trigger lithium mode.
- Converter size – A 55-amp converter can charge a battery faster than a 35-amp converter.
- The charging profile is not set in stone. WFCO Auto-Detect converters monitor the current over time at the end of every charge cycle. So, in the event of a mis-detection due to external factors, once the factors are addressed or no longer present, the converter can still properly detect the battery type during the next charge cycle.

Below is a guide to minimize voltage drop to 2.5% or less. This is a reference guide for optimized charging performance and does not take priority over code requirements.



WFCO Success Built on Innovation and Quality

WFCO Technologies is the most trusted name in the RV industry for power centers and converters. This market leadership is built on 40 years of innovations, many of which have become the industry's standards. WFCO Technologies has established itself as the industry's OEM leader in power conversion products specifically designed for RVs. Our reputation is built on a strong foundation of quality, innovation, and unmatched value, making our products the top choice for OEMs—trusted 4 to 1 over other brands.



At WFCO, we pride ourselves on our relentless pursuit of technical advancements in power conversion products. Our commitment to innovation doesn't stop at the product level. We continually invest in research and development to remain at the forefront of the industry, ensuring that our products are not only the best today but also ready for the demands of tomorrow.

Why we are the "experts" in RV Power

* Industry Leadership

WFCO is a recognized leader in the power conversion industry, specializing in providing OEM solutions for the RV market. Our range of products, tailored specifically for RV manufacturers, has established WFCO as a trusted partner for over four decades. OEMs consistently choose WFCO products over other brands, thanks to our reputation for quality and innovation. With over 40 years of experience, WFCO has built a solid reputation for delivering trusted quality and value to our customers.

* Knowledgeable Technical Support and Engineering Team

Our team of highly skilled technical support and engineering professionals is one of WFCO's greatest strengths. Behind our products stands a dedicated team of experienced and knowledgeable professionals. Our technical support and engineering teams are industry experts, always ready to assist with any inquiries or challenges. Their deep understanding of RV power allows them to provide solutions that meet and exceed expectations. With decades of collective experience, they are available to provide expert guidance, troubleshoot issues, and help ensure the smooth integration of our products into any system. Our customer-centric approach ensures that you receive the support you need, when you need it.



* Commitment to Product Innovation

WFCO continues to push the boundaries of product innovation, developing state-of-the-art solutions designed to meet the evolving needs of the RV industry and simplifying your RV lifestyle. We take pride in producing power conversion products that not only meet but exceed industry standards, ensuring optimal performance and longevity.

* Trusted Partner in the Industry

WFCO is more than just a supplier. We are a partner dedicated to the success of our clients. Our extensive industry experience, combined with our unwavering support for our products, ensures that we remain a reliable and trusted partner in the power conversion space. We are proud to stand behind our products and continue to be the preferred choice for OEMs across the RV industry.



DOOR ASSEMBLIES

WF-8930/50 SERIES



Part # WF-8930/50NNP-DA, Door Assembly for WF-8930/50NP-Brown

Part # WF-8930/50NNPB-DA, Door Assembly for WF-8930/50NPB-Black



Part # WF-8930/50NNPB-50-PDA, Extended Door Assembly for WF-8930/50NPB-50-Black



Part # WF-8540-PB-DA, Door Assembly for WF-8540-Black

Part # WF-8560-PB-DA, Door Assembly for WF-8560-Black

WF-8500 SERIES



Part # WF-9540PB-DA, Door Assembly for WF-9540-Black

Part # WF-9560PB-DA, Door Assembly for WF-9560-Black

Part # WF-9580PB-DA, Door Assembly for WF-9580-Black

WF-9500 SERIES



Part # WF-9990PB-DA, Door Assembly for WF-9990-Black

WF-9900 SERIES

DOOR ASSEMBLIES

WF-7900 SERIES



- Part # WF-7925-GE-S-DA, Door Assembly for WF-7925-GE-S-Black
- Part # WF-7925-S-DA, Door Assembly for WF-7925-S-Black

WF-8700 SERIES



- Part # WF-8712-PDA, Door Assembly for WF-8712-Brown
- Part # WF-8712-PB-DA, Door Assembly for WF-8712-Black
- Part # WF-8725-PDA, Door Assembly for WF-8725-Brown
- Part # WF-8725-PB-DA, Door Assembly for WF-8725-Black



- Part # WF-8735-PDA, Door Assembly for WF-8735-Brown
- Part # WF-8735-PB-DA, Door Assembly for WF-8735-Black
- Part # WF-8740-PDA, Door Assembly for WF-8740-Brown
- Part # WF-8740-PB-DA, Door Assembly for WF-8740-Black

WF-8900 SERIES



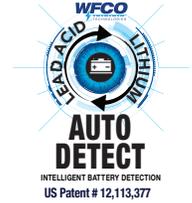
- Part # WF-8935PEC-DA, Door Assembly for WF-8935-Brown
- Part # WF-8935PEC-B-DA, Door Assembly for WF-8935-Black
- Part # WF-8945PEC-DA, Door Assembly for WF-8945-Brown
- Part # WF-8945PEC-B-DA, Door Assembly for WF-8945-Black
- Part # WF-8955PEC-DA, Door Assembly for WF-8955-Brown
- Part # WF-8955PEC-B-DA, Door Assembly for WF-8955-Black
- Part # WF-8965-PDA, Door Assembly for WF-8965-Brown
- Part # WF-8965-PDAB, Door Assembly for WF-8965-Black
- Part # WF-8975-PDA, Door Assembly for WF-8975-Brown
- Part # WF-8975-PDAB, Door Assembly for WF-8975-Black



- Part # WF-8935-PDA, Door Assembly for WF-8935AN-P-Brown
- Part # WF-8945-PDA, Door Assembly for WF-8945AN-P-Brown
- Part # WF-8955-PDA, Door Assembly for WF-8955AN-P-Brown

WF-8500-AD POWER CENTER SERIES

Auto-Detect: Two Battery Options in One Space



With future RV development in mind, WFCO has developed the WF-8500-AD Series, an advancement to the most forward-thinking power center available today that includes an industry-first, Auto-Detect technology. This new microprocessor-driven technology will recognize Lithium-Ion and Lead-Acid battery chemistries and automatically adjust the charging profile to match the battery type.



PRODUCT FEATURES

These WFCO exclusives provide more safety and diagnostic information to technicians and RV owners.

Zero clearance design is a space - saving WFCO exclusive.

The airflow system draws cool air in from the front and expels warm air out through the front as well. Space is not needed behind the converter for warm air exhaust. Cooling fans operate only when the electric load requires it, avoiding temperature spikes and providing quieter operation.

OTHER EXCLUSIVE WFCO FEATURES

- Ultra-high power density, which provides more power in a small space.
- 13 DC circuits, including three 30 amp, for design flexibility.
- 30 amp main application with 9 AC branches.



Optional AC Reverse Polarity Detection meets RVIA and NEC requirements with audible alarm notification. No additional wiring or hookup required and accepts hi-pot testing.



Three AC LEDs inside the door indicate the status of incoming voltage. Green is normal, yellow is low, and red is too high of a voltage.



Every DC circuit has a blown-fuse indicator that can be seen through our exclusive viewing window.



SPECIFICATIONS	WF-8540-AD	WF-8560-AD
Power Input	685 W	1030 W
Input Voltage	105 V AC - 130 V ac / 60 Hz	
Output Current	40A / 37 A	60A / 55A
Converter Type (LA/LI)	3 Stage Intelligent Charge / 2 Stage Intelligent Charge	
Voltage Output (LA/LI)	13.2 - 14.4 V DC / 13.6 - 14.6 V DC	
Normal mode	13.6 V DC	
Trickle charge mode (LA Only)	13.2 V DC	
Bulk charge mode	14.4 V DC / 14.6 V DC	
Outer Dimensions	9 1/2"W x 13"H x 8 1/2"D	
Rough Opening	7 7/8"W x 11 3/8" H x 7 3/8" D	
Weight	5.9 lb	6.12 lb

Certifications: UL® and cUL® listed and FCC Class B compliant. Specifications are subject to change without notice or obligation.

WFCO works with installers every day to streamline installation and reduce time.

EASY INSTALLATION

Exclusive choice of four DC circuit connection modes allows customers to select their preferred wiring connection mode for speed and ease.



Quick Connect Terminals



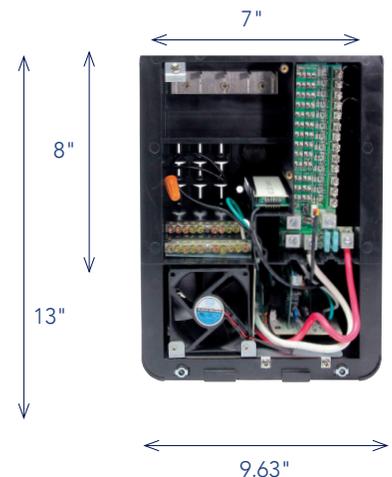
Screw Terminals



Wire Pigtailed



WAGO Connectors



WF-8700-AD POWER CENTER SERIES

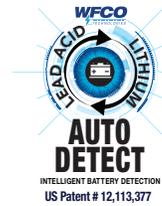
Eliminating the risk of over and under charging the WF-8700-AD will maximize your battery life with multi-stage charging and current monitoring in both Lead-Acid and Lithium-Ion profiles.

WFCO's proven WF-8700-AD Series offers an industry-first, Auto-Detect technology. No more buttons. No more switches. An accurately charged battery gives RV owners peace of mind.

Battery Flexibility for Smaller RVs



LED Warning Lights - WFCO was the first to use LED alerts for open 12V circuits. The exclusive viewing design in our WF-8700-AD models lets RV owners easily see when there's a problem.



WF-8700-AD Series 35/40 amps
Zero Clearance Design



OTHER WF-8700-AD FEATURES

- WF-8725-AD has three AC circuits, one 30 amp primary circuit, and four DC circuits for design flexibility in the smallest RVs.
- WF-8735/40-AD has five AC circuits in addition to one 30 amp primary circuit and six DC circuits for the needs of larger campers and small travel trailers.

Zero clearance design is a space-saving WFCO exclusive. The airflow system draws cool air in from the front and also expels warm air through the front. Space behind the converter for warm air exhaust is not needed. Cooling fans operate only when the electric load requires it, avoiding temperature spikes and providing quieter operation.

SPECIFICATIONS	WF-8725-AD	WF-8735-AD	WF-8740-AD
Power Input	425 W	595 W	680W
Input Voltage		105-130 V AC/60 Hz	
Output Current (LA/LI)	25A / 23 A	35 A / 32.5 A	40 A / 37 A
Converter Type		3 Stage Converter Charger / 2 Stage Converter Charger	
Voltage Output		13.2 - 14.4 V DC / 13.6 - 14.6 V DC	
Normal mode		13.6 V DC	
Trickle charge mode (LA Only)		13.2 V DC	
Bulk charge mode (LA/LI)		14.4 V DC / 14.6 V DC	
Outer Dimensions	11 7/8"W x 7 5/16"H x 5"D	11 7/8"W x 8 1/4"H x 5 5/16"D	
Rough Opening	10 1/2"W x 6 1/8" H x 5 1/4"D	10 1/2"W x 6 1/8" H x 5 1/4"D	
Weight	4.75 lb		5.5 lb

Certifications: UL® and cUL® listed and FCC Class B compliant. Specifications are subject to change without notice or obligation.

ALL MODELS: Standard Safety Features/Protections: Over Current, Over Temperature, Over Voltage, Reverse Polarity

Installation: WF-8725-AD: AC Circuits: 4 (1 Main and 3 Branch Circuits); DC Circuits: 4 (3 Branch and 1 Battery); WF-8735-AD, WF-8740-AD: AC Circuits:

6 (1 Main and 5 Branch Circuits); DC Circuits: 6 (5 Branch and 1 Battery) Case Material: Plastic, Color: Black

WF-8900-AD POWER CENTER SERIES

AUTO-DETECT: ONE UNIT WITH BATTERY RECOGNITION



Our WF-8900-AD Power Center Series has been the RV industry's preferred power center for years, outselling all other power centers combined. Building on this success, the WF-8900-AD Power Center Series includes an industry-first, Auto-Detect technology. This new microprocessor-driven technology will recognize Lithium-Ion and Lead-Acid battery chemistries and automatically adjust the charging profile to match the battery type.

PRODUCT FEATURES

LED Warning Lights - WFCO was the first to use LED alerts for open 12 V circuits. The exclusive viewing design, lets RV owners easily see when there's a problem.



The WF-8900-AD Series features eleven DC circuits which include two 30 amp DC circuits, allowing manufacturers to install more high power consuming appliances like slide-out motors, electric awnings and beds.



Zero clearance design is a space-saving WFCO exclusive. The airflow system draws in cool air and expels warm air from the front. The cooling fan operates only when the electric load requires it, avoiding temperature spikes and providing quieter operation. For warm air exhaust, space behind the WF-8965/75-AD models is unnecessary.



EASY INSTALLATION

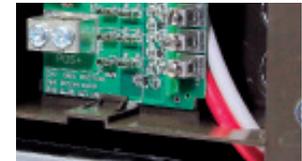
Optional GE model compatible with GE THQP slimline breakers.



Integrated transfer switch mount allows the WFCO T-30 transfer switch to be easily installed directly to the back of the power center.



Thumb Tab design permits easy removal of DC fuse panel for out of box work and easy wire routing.



SPECIFICATIONS	WF-8935-AD	WF-8945-AD	WF-8955-AD	WF-8965-AD	WF-8975-AD
Power Input	600 W	770 W	940 W	1110 W	1280 W
Input Voltage	105-130 V AC/60 Hz				
Output Current (LA/LI)	35A / 32.5 A	45A / 41.5 A	55 A / 50 A	65 A / 60 A	75 A / 70 A
Converter Type (LA/LI)	3 Stage Intelligent Charge / 2 Stage Intelligent Charge				
Voltage Output	13.2 - 14.4 V DC Range / 13.6 - 14.6 V DC				
Normal mode	13.6 V DC				
Trickle charge mode (LAOnly)	13.2 V DC				
Bulk charge mode (LA/LI)	14.4 V DC / 14.6 V DC				
Outer Dimensions	12"W x 10 3/4"H x 7"D				
Weight	7 lb	7.75 lb	7.75 lb	9.75 lb	10 lb
Rough Opening	12 1/4"W x 11" H x 7 3/8"D				

Certifications: UL® and cUL® listed and FCC Class B compliant. Specifications are subject to change without notice or obligation. ALL MODELS: Standard Safety Features/Protections: Over Current, Over Temperature, Over Voltage, Reverse Polarity. AC Circuits: 1 Main with 9 Branch Circuits; DC Circuits: 11 DC, nine 20 amp and two 30 amp Case Material: Plastic, Color: Black

WF-9500-AD SERIES POWER CENTER

INCREASE YOUR OPTIONS WITH AUTO-DETECT



As Lithium-Ion batteries increase in popularity, WFCO knows that our customers want flexibility. The WF-9500-AD Series includes an industry-first, Auto-Detect technology. This new microprocessor-driven technology will recognize Lithium-Ion and Lead-Acid battery chemistries and automatically adjust the charging profile to match the battery type.



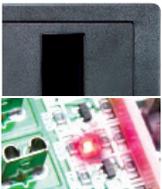
PRODUCT FEATURES

These WFCO exclusives provide more safety and diagnostic information to technicians and RV owners.

Zero clearance design is a space-saving WFCO exclusive. The airflow system draws cool air in from the front and expels warm air out through the front. Space is not needed behind the converter for warm air exhaust. Cooling fans operate only when the electric load requires it, avoiding temperature spikes and providing quieter operation.

OTHER EXCLUSIVE WFCO FEATURES

- Ultra-high power density, which provides more power in a small space.
- 7 DC circuits, including three 30 amp and fourteen 20 amp, for design flexibility.
- Two 50 amp main breakers with up to 12 AC circuits when using duplex



Every DC circuit has a blown-fuse indicator that can be seen through our exclusive viewing window.



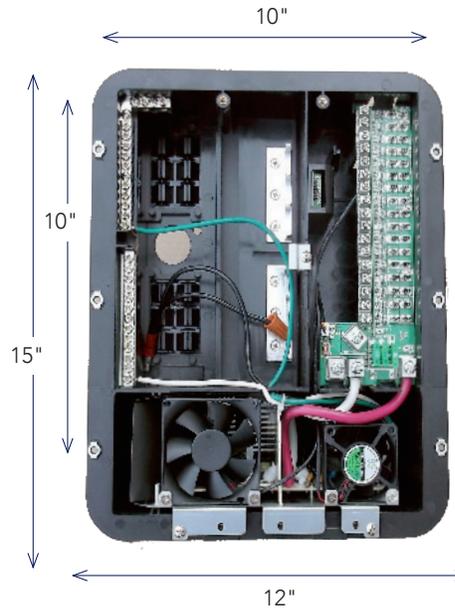
Technicians benefit from an amber LED showing battery connectivity as well as bulk mode status.



Three AC LEDs inside the door indicate the status of incoming voltage. Green is normal. Yellow is low. Red is too high.

EASY INSTALLATION

WFCO works with installers every day to streamline installation and reduce time.



Exclusive choice of four DC circuit connection modes allows customers to select their preferred wiring connection mode for speed and ease.



Quick Connect Terminals



Screw Terminals



Wire Pigtails



WAGO Connectors

Zero clearance design makes installation in tight spaces easier, while providing plenty of hand room for installers to work.

SPECIFICATIONS	WF-9540-AD	WF-9560-AD	WF-9580-AD
Power Input	685 W	1030 W	1370 W
Input Voltage	105 V AC - 130 V AC / 60 Hz		
Output Current	40 A / 37 A	60 A / 55 A	80 A / 75 A
Converter Type (LA/LI)	3 Stage Intelligent Charge / 2 Stage Intelligent Charge		
Voltage Output (LA/LI)	13.2 - 14.4 V DC / 13.6-14.6 V DC		
Normal mode	13.6 V DC		
Trickle charge mode (LA ONLY)	13.2 V DC		
Bulk charge mode (LA/LI)	14.4 V DC / 14.6 V DC		
Outer Dimensions	11 7/8"W x 14 3/4"H x 9 7/8"D		
Rough Opening	10 1/8"W x 13 1/16"H x 8 3/4" D		
Weight	7.7 lbs	7.9 lbs	9.3 lbs

Certifications: UL® and cUL® listed and FCC Class B compliant. Specifications are subject to change without notice or obligation.

WF-8900-AD-MBA & WF-9500-AD-MBA

MAIN BOARD ASSEMBLY SERIES

Easy BATTERY FLEXIBILITY



Our WF-8900-AD and WF-9500-AD-MBA Series are a quick, easy replacement part for all power centers that now includes an industry-first, Auto-Detect technology. This new microprocessor-driven technology will recognize Lithium-Ion and Lead-Acid battery chemistries and automatically adjust the charging profile to match the battery type.



WF-8900-AD-MBA's



SPECIFICATIONS	WF-8935-AD-MBA	WF-8945-AD-MBA	WF-8955-AD-MBA	WF-8965-AD-MBA	WF-8975-AD-MBA
Power Input	600 W	780 W	950 W	1260 W	1300 W
Input Voltage/Current	7.65 amps	105-130 V ac/60 Hz	11.45 amps		15.16 amps
Output Current (LA / L2)	35 A/32.5 A	45 A/41.5 A	55 A/50 A	65 A/60 A	75 A/70 A
Converter Type	3 Stage Converter Charger / 2 Stage Converter Charger				
Voltage Output	13.2 - 14.4 V DC / 13.6 - 14.6 V DC				
Normal mode	13.6 V DC				
Trickle charge mode (LA Only)	13.2 V DC				
Bulk charge mode	14.4 V DC / 14.6 V DC				
Dimensions	11 7/8"W x 5 3/4"H x 7 5/8"D				
Weight	4 lb	5 lb	5 lb	8 lb	8 lb

Certifications: UL® and cUL® listed and FCC Class B compliant.
 ALL MODELS: Standard Safety Features/Protections: Over Current, Over Temperature, Over Voltage, Reverse Polarity

WF-9500-AD-MBA's



SPECIFICATIONS	WF-9540-AD-MBA	WF-9560-AD-MBA	WF-9580-AD-MBA
Power Input	685 W	1030 W	1370 W
Input Voltage	105-130 V AC/60 Hz	105-130 V AC/60 Hz	105-130 V AC/60 Hz
Output Current	40 A	60 A	80 A
Converter Type (LA/LI)	3 Stage Converter Charger / 2 Stage Converter Charger		
Voltage Output (LA/LI)	13.2 - 14.4 V DC / 13.6 - 14.6 V DC		
Normal mode	13.6 V DC		
Trickle charge mode (LA ONLY)	13.2 V DC		
Bulk charge mode (LA/LI)	14.4 V DC / 14.6 V DC		
Dimensions	7 1/16"W x 3 7/8"H x 9 1/2"D		
Weight	4 lb	5 lb	5 lb

Certifications: UL® and cUL® listed and FCC Class B compliant. Specifications are subject to change without notice or obligation.
 ALL MODELS: Standard Safety Features/Protections: Over Current, Over Temperature, Over Voltage, Reverse Polarity

WF-8900-AD-REP CONVERTER REPLACEMENT KIT SERIES

AUTO-DETECT Easy Upgrade & Installation

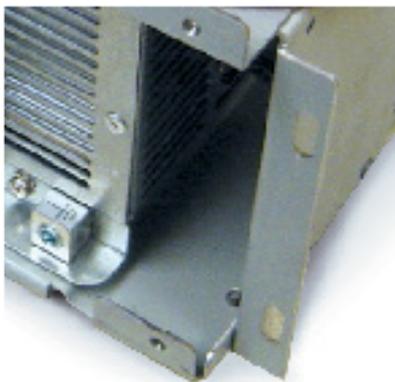
The WF-8900-AD-REP Series now includes an industry-first, Auto-Detect technology. This new microprocessor-driven technology will recognize Lithium-Ion and Lead-Acid battery chemistries and automatically adjust the charging profile to match the battery type. The

WF-8900-AD-REP Converter Replacement Kit allows easy upgrade of existing power centers.

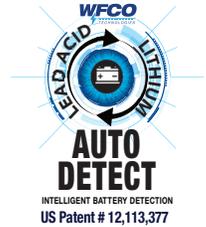


EASY INSTALLATION

WFCO works with installers every day to streamline installation and reduce time.



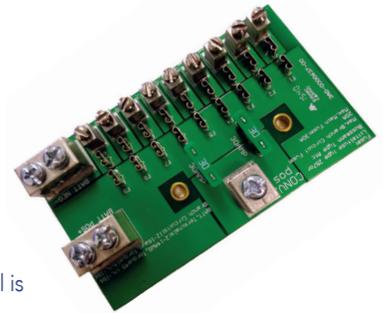
The kit consists of the converter/charger mounted into a metal bracket to make installation easy as an upgrade or replacement for multiple brands of power converters.



PRODUCT FEATURES

The WF-8900-AD-REP provides all of WFCO's performance standards:

- Quiet Operation
- Filtered Power
- Overload Protection
- Short Circuit Protection
- FCC Class B Approval



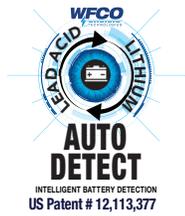
A DC fuse board panel is included for all kits.

SPECIFICATIONS	WF-8935-AD-REP	WF-8945-AD-REP	WF-8955-AD-REP
Power Input	600 W	780 W	950 W
Input Voltage	105 V AC - 130 V AC / 60 Hz		
Output Current (LA/LI)	35 A / 32.5 A	45 A / 41.5 A	55 A / 50 A
Converter Type	3 Stage Converter Charger / 2 Stage Converter Charger		
Voltage Output	13.2 - 14.4 V DC / 13.6 14.6 V DC		
Normal mode	13.6 V DC		
Trickle charge mode (LA Only)	13.2 V DC		
Bulk charge mode	14.4 V DC / 14.6 V DC		
Kit Size:	11 7/8"W x 5 3/4"H x 7 5/8"D		
Outer Dimensions	13 1/4"W x 5 1/4"H x 7 7/8"D		
Fuse Board Dimensions	2 7/8"W x 7/8"L x 5 1/4"H		
Weight	6.75 lb	8 lb	9.25 lb

Certifications: UL® and cUL® listed and FCC Class B compliant. Specifications are subject to change without notice or obligation.

WF-68100AD DECK MOUNT CONVERTER CHARGER SERIES

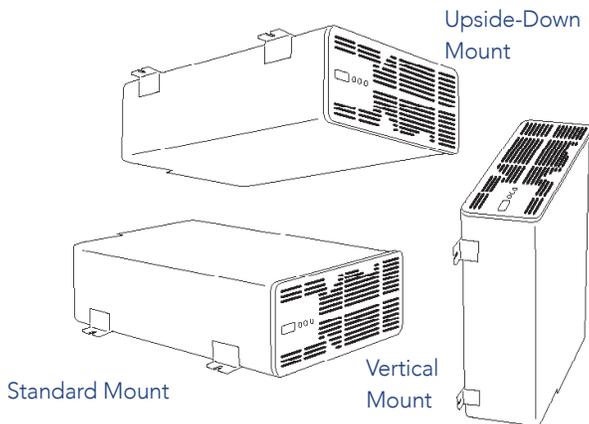
Eco-Friendly **POWER** with **AUTO-DETECT**



The WF-68100AD Deck Mount Converter charger now includes an industry-first Auto-Detect technology. This new microprocessor-driven technology will recognize Lithium-Ion and Lead-Acid battery chemistries and automatically adjust the charging profile to match the battery type. Power Factor Correction requires 30% less input, making the WF-68100AD an eco-friendly 12 Volt system.

EASY INSTALLATION

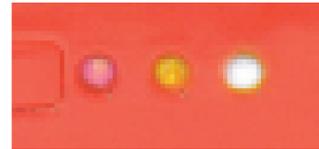
WFCO works with installers every day to streamline installation and reduce time.



WFCO recommends horizontal mounting of the WF-68100AD series. You can mount it in any position that provides unobstructed ventilation for the fan and vent holes.

WFCO makes fully insulated connections for protection with an open-top design for ease of use for fast and nearly effortless installation.

PRODUCT FEATURES



LED Performance Lights allow RV owners to easily see when the converter is operating correctly or when there's a problem, providing more safety and diagnostic information to technicians and RV owners.

- **Red** - lights up when your converter is overloaded.
- **Green** - lights up when your converter is in charging mode.
- **Amber** - lights up when your unit is off and connected to full battery/flickers when approaching low charge.

SPECIFICATIONS	WF-68100AD
Power Input	1710 W
Input Voltage	105 V AC - 130 V AC / 60 Hz
Output Current (LA/LI)	100 A
Power Factor Correction	Unity (0.99)
Efficiency	84% (VA value under full load)
Converter Type (LA/LI)	3 Stage Converter Charger / 2 Stage Converter
Voltage Output (LA/LI)	13.2 - 14.4 V DC / 13.6-14.6 V DC
Normal mode	13.6 V DC
Trickle charge mode (LA Only)	13.2 V DC
Bulk charge mode	14.4 V DC / 14.6 V DC
Outer Dimensions	9 3/4"W x 3 3/4"H x 13 1/2"D
Weight	10.25 lb

Certifications: UL® and cUL® listed and FCC Class B compliant. Specifications are subject to change without notice or obligation.

WF-9800-AD DECK MOUNT CONVERTER CHARGER SERIES

AUTO-DETECT Power Choices that Fit EVERYWHERE



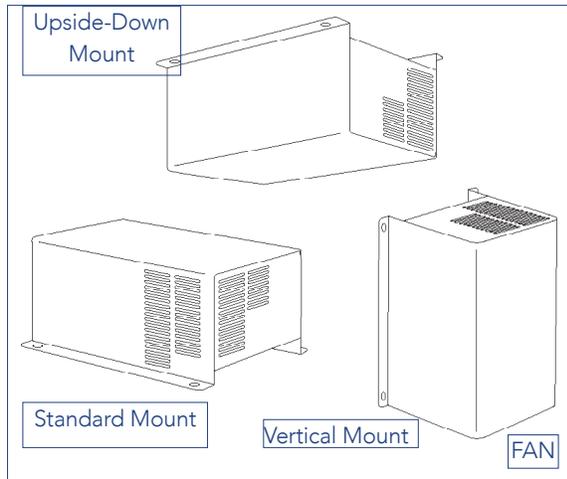
The WF-9800-AD Series now includes an industry-first, Patent Pending Auto-Detect technology. This new microprocessor-driven technology will recognize Lithium-Ion and Lead-Acid battery chemistries and automatically adjust the charging profile to match the battery type.

EASY INSTALLATION

This versatile deck mount converter can be installed in any position, making RV design more flexible for manufacturers.

Mount the converter vertically with the fan at the bottom to enhance cooling. WF-9800-AD Series converter features easy horizontal installation and can install upside down.

WFCO makes fully insulated connections for protection with an open-top design for ease of use for fast and nearly effortless installation.



PRODUCT FEATURES



Quiet operation is assured as the cooling fan runs only when needed.



WF-9800-AD converters are available in more size and power choices than other brands. Manufacturers can match the exact needs of every RV, saving space and cost.

SPECIFICATIONS	WF-9835-AD	WF-9845-AD	WF-9855-AD	WF-9865-AD	WF-9875-AD
Power Input	600 W	770 W	940 W	1110 W	1280 W
Input Voltage	105 V AC - 130 V AC / 60 Hz				
Output Current (LA/LI)	35 A / 32.5 A	45 A / 44.5 A	55 A / 50 A	65 A / 60 A	75 A / 70 A
Converter Type (LA/LI)	3 Stage Converter Charger / 2 Stage Converter Charger				
Voltage Output (LA/LI)	13.2 - 14.4 V DC / 13.6 - 14.6 V DC				
Normal mode	13.6 V DC				
Trickle charge mode (LA Only)	13.2 V DC				
Bulk charge mode (LA/LI)	14.4 V DC / 14.6 V DC				
Outer Dimensions	4 5/8"W x 4"H 7 1/2"D	4 3/4"W x 4"H x 8 3/4"D	5 1/8"W x 4"H x 10 1/4"D		
Weight	4 lb	5.25 lb	5.5 lb	6.25 lb	6.75 lb

Certifications: UL® and cUL® listed and FCC Class B compliant. Specifications are subject to change without notice or obligation.
 ALL MODELS: Standard Safety Features/Protections: Over Current, Over Temperature, Over Voltage, Reverse Polarity
 Installation: Case Material: Metal, Color: Gray

WF-8930/50 DISTRIBUTION PANEL SERIES



The **FLEXIBILITY** of a Two-Piece System



The WF-8930/50 Distribution Panel teams up with any of WFCO's deck mount converters to give engineers extra flexibility in product design. The two-piece system enables the panel to fit a smaller wall area, providing more RV design options.

With 40 years of power equipment experience, WFCO has developed a distribution solution based on the real needs of RV manufacturers. Deck mount converters plug into the AC receptacle on the distribution center's back to receive power. The WF-8930/50 is famous for its 50 amp AC service but is also available with 30 amp service.

EASY INSTALLATION

WFCO works with installers every day to streamline installation and reduce time.



All WFCO converters come standard with 15 or 20 amp plugs for easy power supply connection. The WF-8930/50 has an AC receptacle rated for 15 or 20 amps and is located on the back, allowing easy convert-er plug-in for power.



Built-in terminal bars for the negative DC wiring eliminate the time and cost of installing a separate negative DC bar.

PRODUCT FEATURES

WFCO provides complete safety and diagnostic information to technicians and RV owners.

The 12V fuse panel quickly and easily snaps into place. No time-consuming screws are needed.



- Primarily designed for 50 amp main, with 12 AC branch circuits and 15 DC circuits.
- The DC compartment is equipped with Negative DC terminal bars.
- The WF-8930/50-50 is the WF-8930/50 panel board equipped with a larger door assembly, permitting manufacturers to standardize installation cutouts when offering 30 amp service as standard and 50 amp service as an option. Contact our Power Pros for more information at 574-294-8997, Option 1.



Optional Reverse Polarity Detection meets new RVIA and NEC requirements with audible alarm notification. No additional wiring or hookup is required, and it accepts hi-pot testing.



Strain relief is built into the back of the WF-8930/50 cabinet, making installation of wiring fast and easy.

SPECIFICATIONS

	WF-8930/50NPB
Input Voltage	120 V AC or 240 V AC
Input Current	30 amps or 50 amps
AC Breakers Setup	30 amps: Main + 7 Branch circuits 50 amps: Main + 12 Branch circuits
Outer Dimensions	13 3/4"W x 9 1/2"H x 4"D
Rough Opening	12 1/4"W x 8 3/8"H x 4 1/2" D
Larger Door Assembly	13 7/8"W x 11 3/4"H
Weight	3.75 lb

Certifications: UL® and cUL® listed.

Specifications are subject to change without notice or obligation.

WF-7910/20 DISTRIBUTION PANEL SERIES

POWER Accessory Series

7910 Distribution Panel

The WF-7910 Distribution Panel Series 12 V Power Converter Accessory DOES NOT have a converter installed within the enclosure. Power is supplied to the WF-7910 Distribution Panel Series 12 V Power Converter Accessory from an external converter/charger, WF-9800 Series Converter/Charger, located elsewhere in the RV. That unit will provide Reverse Battery

Placement Protection. Consult that converter/charger's manual for location and re-instructions. The DC fuse board has individual blown fuse indicators as standard equipment. The WF-7910 and WF-7910-Q 12V Distribution Panel Series have 20 DC circuits, and the WF-7910-WAGO 12V Distribution Panel Series has 17 DC circuits. Each of the circuits contains a Red LED to indicate a blown fuse. If one of the circuits draws more current than the rating of the fuse, the fuse will blow. When this occurs, the Red LED for that circuit will illuminate.



7920 Distribution Panel



WF-7920 AC Distribution Center accepts standard residential breakers. Models with "-GE" in the part number will only accept GE slim breakers. The WF-7923 has spaces for 30 Amp Main breakers and up to 6 Branch breakers when duplex breakers are used.

The WF-7923-S has spaces for a 30 Amp Main breaker and a separate 20 Amp Main breaker (for the inverter circuit). The WF-7925 has spaces for two 50 Amp Main breakers and up to 16 Branch breakers when using duplex breakers. The WF-7925-S has spaces for two 50 Amp Main breakers and a separate 30 Amp Main Breaker (for the inverter circuit). The breakers can be purchased at most big-box department stores and home centers.

WHY WFCO

**Engineered RV Power.
Proven Performance.**

- Designed specifically for RV applications
- Proven quality through rigorous in-house testing
- UL/CUL listed & FCC Compliant
- Clean, stable power performance
- Backed by responsive OEM, distributor & dealer support

WFCO
TECHNOLOGIES
Innovating the future of RV POWER.



Learn more at wfcotech.com or contact your WFCO representative

WF-5110 INVERTER SERIES | 1000-WATT

Intelligent Features & Technology



PRODUCT FEATURES



Reliability. Vertically integrated, WFCO has total supply chain control, ensuring quality materials, parts and processes at each stage. Components are quality tested at critical manufacturing stages resulting in zero faults at the final 4-hour burn-in test, helping keep warranty claims below 1%. All models are UL® and cUL® listed and FCC Class B compliant.

SPECIFICATIONS	WF-5110
Power Output	1000 W
Input Voltage	10.5 - 15 V DC
Output Waveform	Pure Sine Wave
Voltage Output	120 V AC / 60 Hz
Efficiency Load	>86% at Full Load
Transfer Switch	8.5 A
Transfer Time	20 milliseconds
AC Output Breaker	16 A
Dimensions	11 1/8"W x 4"H x 14 3/4"D
Weight	11.5 lb

Certifications: UL® and cUL® listed and FCC Class B compliant. Specifications are subject to change without notice or obligation.

No crimping required for 4-gauge wire terminal connections, reducing installation time and fatigue.



Three status indicators, a voltage indicator with a message panel and a selection button, communicate helpful information to the owner or technician:

- Green - Indicates AC input status.
- Amber - Indicates unit is in invert mode (the inverter is creating 110 V power).
- Red - Indicates inverter failure status.
- LCD Message Panel - Indicates operation status.
- Selection Button lets users choose the display's screen - Battery input voltage, AC output amps, and voltage.



Circuit Breaker to protect outlet from shore power shorts and overloads.

- Remote control.
- Built-in circuit protection on the DC side.
- Pure sine wave output with THD <3%.
- Built in <50 millisecond transfer time. This allows the transfer from utility power to inverted power to be interruption free, protecting sensitive equipment.

The WF-5110 Series remote includes an ON/OFF button and a 20-ft cable. The switch on the face of the inverter must be in the "out" position for the remote to work.



The WF-5110 Series features a time-saving plug-and-play design that allows it to be simply plugged into an AC outlet to connect directly to the RV's AC system.

WF-5318/20 INVERTER SERIES | 1800/2000-WATT

Technology and INNOVATION

The newly launched WF-5300 Inverter Series provides customers with an innovative power management system providing customers with two more options for your inverter needs. Both the WF-5318 (1800-watt output rate) and the WF-5320 (2000 watt output rate) deliver outstanding performance and efficiency.



The internal transfer system will automatically and instantly supply inverter power if your external AC power source stops functioning. WFCO provides the latest in inverter technology with essential features, including: a remote-control panel complete with power-status readouts, a pure sine wave output needed for your RV's premium electronics and refrigerators, complete overload protection, easy lever terminals for AC wiring, and a hi-pot testing design that allows you to check the output circuits through the inverter without changing any of your connections.

PRODUCT FEATURES

Other features for both the WF-5320 and WF-5318:

- MCU control high frequency Switching Mode topology
- Output overload and short-circuit protection
- Over temperature protection
- High-surge current walk-in capability
- Automatic utility bypass transfer switch
- Greater than 88% System Efficiency
- No parts replacement when battery input reverse polarity.



Standard LCD Remote (On/Off) control panel



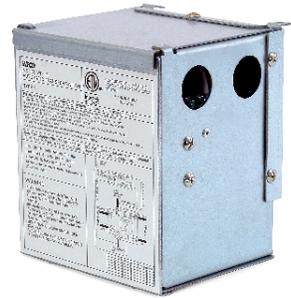
SPECIFICATIONS		
MODEL	WF-5318	WF-5320
Inverter		
Waveform	Sine Wave	
Output Voltage	115 V ac ±3%	
Output Current	15.7 A	17.4 A
Continuous Output Power	1800 W	2000 W
Surge Power, 2 sec.	3600 W	4000 W
Output Frequency	60 Hz ±0.3 Hz	
Output THD, resistive load	< 4%	
Input Voltage Range	10.0 - 16.0 V dc	
Input Current (no load), 12 Vdc input	< 1.6 amps	
Input Current (full load), 12 Vdc input	180 A	200 A
Peak Efficiency	> 90%	
Transfer Switch		
Transfer Time	< 20 ms	
Ac Pass-Through Rating	24.8 amps	
Switch to Shore Power	> 90 Vac or < 130 Vac	
Switch to Inverter	< 90 Vac or > 140 Vac	
Remote Control Panel		
Control Functions	Inverter Start/Stop Display Select	
Display Functions	Ac Output Voltage, Current, Power Dc Input Voltage, Current, Power Ac Input/Standby/Invert Status Protect/Fault Diagnostics	
Protection		
Output Circuit Breaker	30 A	
Overload	Auto shutdown, auto recovery	
Short Circuit	Auto shutdown	
Over Temperature	Auto shutdown, one auto recovery during operation	
Battery Reverse Polarity	No damage	
Safety Listing	UL 458	
Connectors		
Dc Input	Bolts for Ring Lugs Size M8/L25, 13mm hex nuts	
Maximum Torque for Dc Connections	11 lb-ft (15 N-m)	
Ac Input and Output	Lever connectors for up to 10 AWG wire	
Ground	Screw Clamp for up to 2 AWG wire	
Remote Control Panel Connector Type	6P6C (RJ-25)	
Remote Control Panel Cable Length	20 ft (6 m)	30 ft (9 m)
Mechanical/Environment		
Dimensions (LxWxH)	12.3 (13.6) x 9.5 (10.7) x 4 inches	
Weight	11.5 lb	
Cooling	Allow at least 2 cubic feet of air around unit with 3 inches of space at each end for air flow.	
Unit Installation	Bottom or side panel facing downward	
Operating Environment	14 °F to 104 °F and 20% to 90% RH Non-condensing	

TRANSFER SWITCHES 30/50 AMP

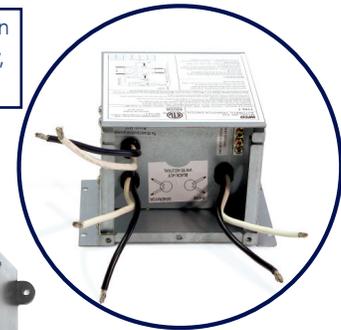
Providing **TROUBLE-FREE** Power Source Changeover

WFCO transfer switches provide trouble-free changeover between shore power and the generator. The T-30 is for the 30 amp service, and the T-57 is for the 50 amp service.

With 40 years of power equipment experience, WFCO knows what is essential. These engineered transfer switches are safe and reliable, and the unit's DC coil prevents AC "chatter" noise and drop-out in low-voltage conditions. A transfer delay feature also prevents power crossover and arcing for additional safety.



Pigtail connections on the T-30 provide easy, fast installation.



PRODUCT FEATURES

- Time delay for gensets to complete self-diagnostics.
- WFCO's "break before make" configuration prevents accidental coupling of power from, or to, the shore line and generator.
- Microsecond time delay switches provide a safety feature by not allowing power crossover or "arcing".
- Shore power is always available (Pass-Through) without having to energize the relays.
- Easy ground bar accessibility is built-into the T-30.

The T-30 is designed to conveniently install onto the back of WF-8900 Power Center Series power centers. No need to find wall space for installation.



Any-direction wall mounting is made easy with the T-30WM model.



The T-57 mounts easily onto a flat surface and is engineered for safe, reliable performance. Its thoughtful design allows the label to be easily readable no matter how the box is installed.

SPECIFICATIONS	T-30	T-57
Input Voltage	120 V AC / 60 Hz	120/240 V AC / 60 Hz
Switching Capacity	30 amps	50 amps
Knockout Holes	3	10
Knockout Sizes	1 x 1/2" 2 x 3/4"	4 x 1/2" 4 x 3/4" 1 x 3/4" & 1-1/4 Concentric
Outer Dimensions:	5 1/8"W x 6"D x 5"H	7 7/8"W x 4 3/4"D x 8 7/8"H
Weight	4.24 lb	5 lb

Certifications: ETL listed to UL1008 and CSA C22.2. Specifications are subject to change without notice or

EM-15 & EM-20 | ENERGY MANAGEMENT SWITCH

More POWER for the RV Lifestyle



Reliability. Vertically integrated. WFCO has total supply chain control, ensuring quality materials, parts and processes at each stage. Components are quality tested at critical manufacturing stages.

As RV designs get more and more like home life, so does the demand on their electrical infrastructure. RVers want to enjoy the comforts and luxuries at home while on the road, and with this in mind, WFCO has developed the cost-efficient EM-20 Energy Management Series switches.

- EM-15 for 15A applications
- EM-20 for 20A applications



These features provide more safety and ease to technicians and RV owners.



Remote control panel, available with the EM-20 so end-users can manually choose the branch circuit with priority operation.

PRODUCT FEATURES

- Smart Load Detection allows the device to switch from two power loads to one load (the designated priority load) when the total current exceeds a pre-determined trip level based on the model.
- The EM-20 can eliminate the need for 50 A service with two air conditioners by operating one at a time.
- Designed to manage two mid to heavy loads, such as microwaves and fireplace/water heaters, the EM-15 seamlessly switches power between appliances.
- The Energy Management Series Switches feature three possible mounting positions for flexible design and quick installation: wall/floor mount, back of WF-8500 Power Center Series power center, or back of 8900 Series power center.

SPECIFICATIONS	EM-15	EM-20
Power	120 V / 60 Hz	
Power Relay	2; Contact Rating: 30A/250 V AC; Coil Rating: 12 V DC	
Logic Control Rating	2; SPDT Contact Rating: 3 A/250 V AC; Coil Rating: 12 V DC	
AC Connections	9P terminal block for 14 AWG wire; suggested 7 in-lbs torque	9p terminal block for 12 AWG wire; suggested 7 in-lbs torque
Remote Switch	12 ft. long wire and RJ11 connector; one switch to set circuit priority; 2 LEDs to indicate which circuit is priority	
MECHANICAL		
Enclosure	Fire-retardant reinforced plastic	
Mounting	Wall/floor mounting or mount directly to the back of WFCO Power Centers (WF-8900 or WF-8500 Series)	
Dimensions	Enclosure: 4 1/4"W x 2 3/4"H x 5"D / With Wall Mount: 4 7/16"W x 3"H x 6 1/2"D	
Weight	0.55 kgs / 1.21 lb	
Safety	CETL / UL 916 + CSA C22.2 NO. 205	

Certifications: UL® and cUL® listed and FCC Class B compliant. Specifications are subject to change without notice or obligation.
Case Material: Plastic, Color: Black

PWRPRO™

Innovating the future of RV CONTROLS.

Not all RV's are created equal, and the differences aren't always easy to spot.

Until Now...



Power Pro is the best-in-class digital control system designed to simplify and enhance the RV experience. The patent-pending AI-trained voice recognition system puts users in full control of their RV with simple voice commands or through manual buttons on the hard-wired panel located in the RV.

Key Voice & Button Control Functions:

- Light Control by Zone Number
- Light Control by Zone Name
- Scenario & Mood Control
- Water Pump Control
- Water Heater Control
- Battery & Tank Level Monitoring w/ Notifications

Power Pro can also be operated through a RELIABLE, RESPONSIVE, AND ROBUST mobile app.

Power Pro's cutting edge technology allows full control of your RV lifestyle on any mobile device with maximum functionality that includes:

- Embedded voice command operation.
- Fully independent lighting controls with dimming.
- Monitor and control the water system with proactive notifications.
- Safe & secure operation of RV slides and awnings.
- Customize the RV based on user preferences.



“Hey Power Pro....I'm Home!”

Want to transform and elevate your next RV experience?
Just say the word...

PWRPRO

Innovating the future of RV Controls.



Power Pro is the best-in-class digital control system designed to simplify and enhance your RV experience. The AI-trained voice recognition system puts you in full control of your RV with simple voice commands or through manual buttons located on the hard-wired panel. Either way, elevating your total RV experience is just a command away.

WF-3510-KIT Power Pro - Base System
WF-3610-KIT Power Pro - Expansion One System

Key Voice & Button Control Functions:

- Light Control by Zone Number
- Light Control by Zone Name
- Battery & Tank Level Monitoring with Notifications
- Water Pump Control
- Water Heater Control
- Scenario & Mood Control

Power Pro can also be operated through a RELIABLE, RESPONSIVE, AND ROBUST mobile app. Power Pro's cutting edge technology allows full control of your RV lifestyle on any mobile device with maximum functionality.



Scan the QR Code to learn more about the WFCO Power Pro System

PWRPRO™

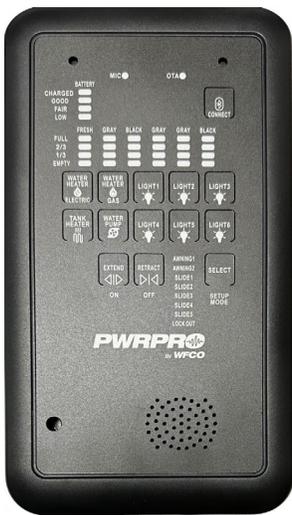
Innovating the Future of RV CONTROLS

Power Pro™ Control System

Power Pro is a best-in-class, patent-pending, digital control system designed to simplify and enhance your experience by building a better connection between you and your RV.

Featuring embedded, AI-trained voice recognition technology, Power Pro includes the industry leading voice control system featuring Natural Language Understanding (NLU) and flexible voice commands without the requirement of data connectivity. The Power Pro system can be operated through the installed hardwired panel, by voice, or through a reliable, responsive, and robust mobile app. Either way, total RV control is always at your fingertips.

Button-Based Control Panel



Power Pro features a button-based panel operation to provide owners with a more traditional way of controlling their RV. Avoid the latency and inconsistency of touch screens and improve the system experience for the RV owner.

System Capabilities

- Battery Level Chart
- Holding Tank Monitoring Chart
- Fully Independent Light Zones
- Water Pump
- Gas/Electric Water Heater w/ DSI Fault
- Holding Tank Heating Pads
- Selectable Slide Room and Awning Control
- Brake Light System Lockout
- Secure, multi-step Bluetooth Pairing
- Manual or Programmable Configuration



AI Trained Voice Control

“Hey Power Pro ... I’m Home”

Unlike other voice systems (Siri, Alexa, etc) Power Pro’s voice system is embedded and fully functional offline without cloud connectivity.

Key Voice Control Functions

- Light Control by Zone Number
- Light Control by Name
- Scenario & Mood Lighting Control
- Water Pump Control
- Water Heater Control
- Battery & Tank Level Monitoring w/ Notifications

Voice Command Guide

- Use the wake-up-word to activate system then wait for system response before giving the voice command.
- Voice recognition is not perfect. Think of the system as another person, speech needs to be clear and at a level above ambient noise to be accurately recognized.

Power Pro Mobile App

Power Pro can also be operated through a RELIABLE, RESPONSIVE, and ROBUST mobile app. Power Pro’s cutting-edge technology allows you to control your RV lifestyle on any mobile device with maximum functionality that includes:

- Embedded voice command operation.
- Fully independent lighting controls with dimming.
- Monitor and control the water system with proactive notifications.
- Safe & secure operation of RV slides and awnings.
- Customize the RV based on your preferences.
- OTA updates for future product enhancements.



Power Pro Sales Guide

The process should begin with an introduction to the system, “The Power Pro control system adds simplicity and convenience to RVing using cutting-edge technology.”

Walk-through Steps:

- Start with POP material introducing the system and available QR codes for app download and resource videos.
- Use installed POP to perform a consolidated overview or the voice recognition system.
- Provide a quick demonstration of the app, focused on:
 - Independent light zone dimming & scenario modes
 - Customization overview
 - Responsiveness to commands

Additional Key Points

- Power Pro includes proactive system notifications
- 3 methods of operating the system
- Industry leading voice recognition system
- Simplify and enhance RVing experience with a convenient, easy to operate, and reliable control system.

Select WFCO PRODUCTS as your Replacement Choice



Visit the Support Tab on our website at www.wfco.tech.com for a growing library of helpful resources.

You can easily upgrade the obsolete or defective converters and electrical components in your RV by installing one of WFCO's high performance replacement products. Take the guesswork out of choosing the right replacement by selecting the WFCO products identified in the charts below. Dimensions are provided to assist you with proper form and fit. Use our convenient crossover charts located on the backside to replace other manufacturer's products with high performance WFCO products.

<u>POWER CENTERS</u>		
WFCO	DESCRIPTION	DIMENSIONS/CUTOUT WxHxD (inches)
WF-6540-AD	40 amp DC	7 7/8 x 11 3/8 x 7 3/8
WF-6560-AD	60 amp DC	7 7/8 x 11 3/8 x 7 3/8
WF-6712	12 amp DC	replace with WF-6725-AD
WF-6725-AD	25 amp DC	10 1/2 x 6 1/8 x 4 3/4
WF-6735-AD	35 amp DC	10 1/2 x 7 x 5 1/4
WF-6740-AD	40 amp DC	10 1/2 x 7 x 5 1/4
WF-6935-AD	35 amp DC	12 1/4 x 11 x 7 3/8
WF-6945-AD	45 amp DC	12 1/4 x 11 x 7 3/8
WF-6955-AD	55 amp DC	12 1/4 x 11 x 7 3/8
WF-6965-AD	65 amp DC	12 1/4 x 11 x 7 3/8
WF-6975-AD	75 amp DC	12 1/4 x 11 x 7 3/8
WF-9540-AD	40 amp DC	10 1/8 x 13 1/16 x 8 3/4
WF-9560-AD	60 amp DC	10 1/8 x 13 1/16 x 8 3/4
WF-9580-AD	80 amp DC	10 1/8 x 13 1/16 x 8 3/4
<u>DECKMOUNT CONVERTERS</u>		
WFCO	DESCRIPTION	DIMENSIONS/CUTOUT WxHxD (inches)
WF-9635-AD	35 amp DC	4 5/8 x 4 x 7 1/2
WF-9645-AD	45 amp DC	4 3/4 x 4 x 8 3/4
WF-9655-AD	55 amp DC	4 3/4 x 4 x 8 3/4
WF-9665-AD	65 amp DC	5 1/8 x 4 x 10 1/4
WF-9675-AD	75 amp DC	5 1/8 x 4 x 10 1/4
WF-66100AD	100 amp DC	9 3/4 x 13 1/2 x 5 3/4
<u>ENERGY MANAGEMENT</u>		
WFCO	DESCRIPTION	DIMENSIONS WxHxD (inches)
EM-15	15 amp	5 1/8 x 3 x 3 1/8
EM-20	20 amp	5 1/8 x 3 x 3 1/8

<u>MAIN BOARD ASSEMBLIES (MBA)</u>		
WFCO	DESCRIPTION	DIMENSIONS WxHxD (inches)
WF-8935-AD-MBA	35 amp DC	7 1/16 x 9 1/2 x 3 7/8
WF-8945-AD-MBA	45 amp DC	7 1/16 x 9 1/2 x 3 7/8
WF-8955-AD-MBA	55 amp DC	7 1/8 x 9 1/2 x 3 3/4
WF-8975-AD-MBA	75 amp DC	10 5/8 x 8 3/4 x 4 1/2
WF-9560-AD-MBA	60 amp DC	6 3/4 x 7 1/4 x 3
WF-9580-AD-MBA	80 amp DC	6 5/8 x 9 x 3
<u>UNIVERSAL REPLACEMENT KIT (REP)</u>		
WFCO	DESCRIPTION	DIMENSIONS WxHxD (inches)
WF-8935-AD-REP	35 amp DC	11 7/8 x 7 5/8 x 5 3/4
WF-8945-AD-REP	45 amp DC	11 7/8 x 7 5/8 x 5 3/4
WF-8955-AD-REP	55 amp DC	11 7/8 x 7 5/8 x 5 3/4
<u>DISTRIBUTION CENTERS</u>		
WFCO	DESCRIPTION	DIMENSIONS/CUTOUT WxHxD (inches)
WF-8930/50NFB	30/50 amp service	12 1/4 x 8 3/8 x 4 1/2
WF-7910	DC 12V	3 1/4 x 1 7/8 x 7
<u>INVERTERS</u>		
WFCO	DESCRIPTION	DIMENSIONS WxHxD (inches)
WF-5110RS	1000 W Pure Sine Wave	11 x 14.6 x 3.9
WF-5318	1600 W Pure Sine Wave	9.5 x 12.3 x 4
WF-5220/5320	2000 W Pure Sine Wave	9.5 x 15.9 x 4.5 / 10.7 x 13.6 x 4
<u>TRANSFER SWITCHES</u>		
WFCO	DESCRIPTION	DIMENSIONS WxHxD (inches)
T30	30 amp	5 1/8 x 6 x 5
T57R	50 amp	7 7/8 x 4 3/4 x 8 7/8

WFCO WARRANTY

Two-Year Limited Product Warranty



Scan the QR Code to access the Warranty Service & Return Page at www.wfcotech.com

Consumer Limited Warranty for WFCO Technologies Products

To provide better service to our customers, WFCO has adopted a Two-Year Limited Product Warranty Policy. The warranty starts with the purchase of the RV.

WFCO extends, to the original owner, a Two-Year Limited Product Warranty. This warranty is in effect from the date of original purchase for a period of two years. This limited warranty is extended specifically for and is limited to Recreational Vehicle applications and is only valid within the continental United States, Alaska, Hawaii, and the Provinces of Canada. WFCO warrants to the owner that its products are free from defects in material and quality under regular use and service based on their intended use and function. This warranty is limited to the repair or replacement, at WFCO's discretion, of any defective parts or defective assembly. Unless applicable, State Law provides. Otherwise, any implied warranties of merchantability or fitness for intended use are limited in duration. You may have other rights as specified by each state.

EXCLUSIONS and LIMITATIONS

The OEM warranty specifically does not apply to the following:

- Any WFCO product that has been repaired or altered by an unauthorized person
- Any damage caused by misuse, faulty installation, testing, negligence, accident, or any WFCO product installed in a commercial vehicle
- Defacing the serial number, altered or removed
- Any WFCO product whose installation has not been per the WFCO written instructions
- Any consequential damages arising from the loss of use of the product, including but not limited to inconvenience, loss of service, loss of revenue, loss or damage to personal property, and cost of all services performed in removing or replacing the WFCO product.

Specifications are subject to change without notice or obligation.

Any WFCO Technologies products sold through unauthorized Internet sources (example: eBay) will be excluded from all warranty coverages offered by WFCO.

CONSUMER WARRANTY CLAIM PROCEDURE

The warranty department will issue an RGA number after determining a defective WFCO product. You can request an RGA number by completing the Warranty Information Form found at wfcotech.com.

Once completed, email the form and proof of purchase to warranty@wfcotech.com or fax both forms to the Warranty Department 574-294-8698. After receipt of the documents, the warranty department will issue an RGA number. This number must appear on all correspondence with warranty service. Write the RGA number in **BOLD** lettering on the top and sides of the shipping carton. **DO NOT** mark directly on the product. Package the product carefully and include a copy of both forms in the shipping carton. **DO NOT** use shredded paper or packing peanuts, as these materials may affect the testing of the product. Returns are

shipped with prepaid charges. WFCO will not be responsible for freight damage incurred during shipping to a service center. Upon validation of the warranty, WFCO shall replace the product with a like product.

WARRANTY ASSISTANCE

The consumer may contact the selling Dealer or OEM for warranty assistance. The consumer may also contact WFCO Technologies, at:

Phone: 574-294-8997 or

Fax: 574-294-8698

How to Submit a Claim – During the FIRST year of warranty:

1. Contact WFCO Technologies Technical Support at 574-294-8997.
2. Share any testing results.
3. Have product available to troubleshoot.
4. If warranty is needed contact OEM (Contact WFCO Technologies if OEM is out of business).
5. Complete the Warranty Information Form found at: www.wfcotech.com. Once the form has been completed, email this form along with Proof of Purchase to warranty@wfcotech.com or fax both forms to the Warranty Department 574-294-8698. Request RGA number.
6. Submit unit.

How to Submit a Claim – After the FIRST year of warranty:

1. Contact Power Pro Technical Support at 574-294-8997, Option 1.
2. Share any testing results.
3. Troubleshoot.
4. If warranty is needed, complete the Warranty Information Fax Sheet found at www.wfcotech.com. Once the form has been completed, email this form along with Proof of Purchase to warranty@wfcotech.com or fax both forms to the Warranty Department 574-294-8698. Request RGA number.
5. Submit unit.
6. Unit will be evaluated.
7. If it is determined to be a warranty case, replacement unit will be issued.

What to send back?

In the case of WF-8500 and WF-9500 Series power centers, only send back the converter/charger. That is the lower portion of the power center. For the rest of the WFCO products, submit the entire unit with removed breakers, fuses, or any additional wires. For the WF-9800 Series, send the whole deck mount unit back. For the WF-8700 Series, remove breakers/fuses and send the entire unit back

FREQUENTLY ASKED QUESTIONS

AUTO-DETECT

What kind of batteries can I use with my Auto-Detect model?

Use any lead acid/AGM series battery or lithium iron phosphate. - Gel batteries are not recommended on Auto Detection models.

Can I use more than one battery with my converter?

Yes, more batteries will increase the run time when using your RV without AC service.

- Using a more extensive battery bank can cause longer charge times. Having the correct-sized model converter will help with shorter charging times. Call our Power Pros for more information.

Why does my battery take a long time to charge?

You can reduce the loads running to increase the current going to the battery.

-Turning off lights or other 12-volt appliances will increase the charge current to the battery.

What wire size should I have from my batteries to the converter?

Wire size is based on the rated output of the charger and the distance from the battery to the converter. The greater the distance between the converter and the battery, the larger the wire size should be connected. The longer wire distance, size, and length will determine the voltage drop. Charts are on-line to help with wire size, distance, and voltage drop.

THE RECOMMENDED TO DO LIST

- With lead acid batteries, be sure to check water levels.
- Don't use electrolytes (battery acid) to top off your battery levels. Use recommended distilled water after a full charge.
- Don't mix battery types or old batteries with new batteries. Using an old battery with a new one can damage the new one if left in storage unattended.
- If your battery feels hot to the touch, have your battery connections checked or have your batteries checked by a trained technician.
- If your battery is lithium, discharge enough capacity to allow your WFCO converter to enter charge mode. This is part of the Auto-Detect used to determine the correct battery profile for charging by the right battery type.
- Make sure your battery bank capacity is manageable for the converter charger. A larger converter charger is available for bigger battery banks. A smaller converter charger may take longer to charge.
- Example: 400-amp hour capacity battery bank with a WF-8725-AD unit. Suppose we were using the total 80 percent capacity of the battery. While the WF-8725-AD converter will charge a 400-amp hour battery bank, consider upgrading the wire and converter sizes to a more significant charge output to maintain optimum efficiency when charging from a generator. This will be different for each battery manufacturer. In that case, it means out of a 100-amp hour battery, 80 percent is usable capacity, so charging at 25-amp hours, you will have just over three hours of charge time per battery.

- Make sure you have the proper fuse size to match the wire size gauge and insulation type. Also, match the wire size to the output of the converter. Wire size should handle the current rating of the converter and the distance from the converter. Various wire charts on the internet will help explain distance, insulation rating, and distance for multiple voltages and current ratings.

TROUBLESHOOTING QUESTIONS

Why don't I have AC in my RV?

- Check your AC breakers at the service box where you plug in for service for your RV.
- Check your breaker at the Power Center or Distribution panel for tripped breakers. Please turn off the main breaker and turn it back on. Check the rest of the breakers in your distribution panel or power center and do the same procedure.
- If breakers are okay and don't appear tripped, check for loose wire connections. *(Do this with AC power and batteries disconnected from the system). *If you feel unfamiliar with the terminology or touching electrical equipment, you should schedule with your local RV technician for further assistance.

Why is there no DC output from my converter?

- Check your connection to AC service.
- Check AC breakers to make sure they did not trip.
- Check fuses for continuity with a continuity checker. Some volt meters will have this built-in or listed in the selection range for the volt meter.
- Check DC wiring for loose connections. The most common is a missing ground wire connection. Another is positive wire insulation being caught between the screw and the buss bar and not contacting the copper of the wire surface with the screw or buss bar.

Why are my batteries not charging?

- If you have 13.6 V DC in the batteries, this is the absorb voltage for lead acid series batteries and the power mode voltage for lithium batteries.
- Lead acid batteries will continue to charge at the absorbing mode at 13.6 V DC and charge slower. *State of charge (SOC) will determine the number of amps going to the battery.
- Lithium batteries at 13.6 V DC are the power mode voltage and are usually fully charged at this point.
- Check In-line fuses. There are multiple in-line fuses. The most common is auto-reset fuses. Most are thermal active types of fuses. These fuses are located within 18 inches on the battery-positive side from the battery to the converter. A voltmeter will be necessary to check for a bad connection.

NOTES

Stock Up & Stand Out. Power Products You Can Trust



**Quality isn't optional. Reliability isn't either.
That's why RV dealers choose WFCO.**

WFCO Product Plan-O-Gram

WFCO's retail Plan-O-Gram makes it easy to prep for the season. Stock up on WFCO's most popular power products and elevate your "power aisle" with a clean, organized display built on trusted performance.

(available in a 3-foot or 4-foot display)

4 Foot Plan-O-Gram



NEW! Power Pro® Countertop Display

Your customers can now experience the Power Pro RV Control System firsthand.

Power Pro is a best-in-class digital control solution that simplifies and elevates every RV adventure. Its AI-trained voice recognition puts full RV control at your command, or at your fingertips through the hard-wired panel. A better RV experience is just a command away.



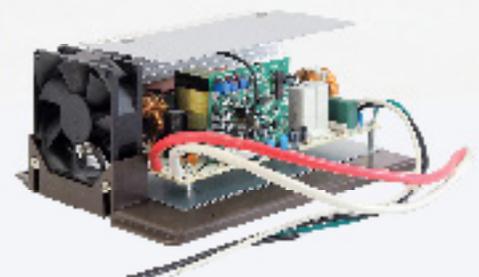
Power Pro®
Countertop Display

Reliable WFCO Power Products

The WF-8955-AD-MBA is a fast, drop-in upgrade for any WF-8955 power center.

Patented Auto-Detect Technology instantly identifies lithium-ion or lead-acid batteries and sets the optimal charge.

Compatible with all WF-8900 Series lower converter sections and many other brands, it installs in minutes.



WF-8955-AD-MBA

**Visit the WFCO Booth at Upcoming Shows
or Contact your WFCO Sales Rep
www.wfcotech.com**

WFCO



TECHNOLOGIES

*Innovating the future of **RV POWER.***

2021 Aeroplex Drive, North
Elkhart, IN 46514
574-294-8997
www.wfcotech.com



Power Pros™ Technical Support
(574) 294-8997, Option 1
technicalsupport@wfcotech.com

Warranty Information
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warranty@wfcotech.com